03-010232US

CLAIMS:

1. An optical fiber retaining method comprising steps of: forming ribbonized optical fibers by applying a first adhesive to a plurality of optical fibers which align like a ribbon;

inserting the ribbonized optical fibers and a support into a heat shrink tube;

holding the ribbonized optical fibers and support firmly in the heat shrink tube by heating the heat shrink tube to shrink; and

fixing the shrunken heat shrink tube on a stand by a second adhesive; wherein

the first adhesive is applied to the plurality of optical fibers at inside and outside of the heat shrink tube.

15

10

5

- 2. The method of claim 1 wherein the plurality of optical fibers are the ones pulled out from an optical cable.
- 3. The method of claim 1 wherein the strength of the first adhesive is in the middle of the strength of the support and that of the optical fibers.
 - 4. The method of claim 2 wherein the support comprises a column having a semicylindrical section.

25

- 5. The method of claim 4 wherein the ribbonized optical fibers are disposed adjacent to a flat side of the support in the heat shrink tube.
- 30 6. The method of claim 1 wherein the support comprises glass.
 - 7. The method of claim 1 wherein the support is inserted

03-010232US

in the heat shrink tube in advance and then the ribbonized optical fibers are inserted in an empty space in the heat shrink tube.

- 5 8. The method of claim 1 wherein the support and heat dissolving tube are inserted in the heat shrink tube in advance and then the ribbonized optical fibers are inserted in the heat dissolving tube.
- 10 9. An optical fiber retainer comprising:

an adhesive to adhere a plurality of optical fibers together which align like a ribbon to form ribbonized optical fibers;

a heat shrink tube to contain the ribbonized optical 15 fibers and a support to firmly hold the ribbonized optical fibers and the support through heat-shrinking; and

a stand to hold the heat shrink tube; wherein the adhesive is applied to the plurality of optical fibers at inside and outside of the heat shrink tube after the heat-shrinking.

10 The apparatus of claim 9 wherein the strength of the adhesive is in the middle of the strength of the support and

that of the optical fibers.

20

25

- 11. The apparatus of claim 9 wherein the support comprises a column having a semicylindrical section.
- 12. The apparatus of claim 9 wherein the ribbonized optical 30 fibers are disposed adjacent to a flat side of the support in the h at shrink tube.
 - 13. The apparatus of claim 9 wherein the support comprises

03-010232US

glass.

5

10

15

- 14. The apparatus of claim 9 further comprising a heat dissolving tube inserted in the heat shrink tube, the ribbonized optical fibers being inserted to the heat dissolving tube.
- 15. An optical fiber retainer comprising:

a first optical fiber holder to contain a first ribbonized optical fibers and a first support with a semicylindrical section and to hold the first ribbonized optical fibers disposed adjacent to a side of the first support;

a second optical fiber holder to contain a second ribbonized optical fiber and a second support with semicylindrical section and to hold the second ribbonized optical fibers disposed adjacent to a side of the second support; and

a stand to hold the first and second optical fiber holders so that the first ribbonized optical fibers held by the first optical fiber holder and the second ribbonized optical fibers held by the second optical fiber holder are close to each other.

16. The retainer of claim 15 wherein each of the first and second supports comprises a column having a semicylindrical section.

25

30

20

- 17. The apparatus of claim 15 wherein the first optical fiber holder holds the first ribbonized optical fibers adjacent to a flat side of the first support and the second optical fiber holder holds the second ribbonized optical fiber adjacent to a flat side of the second support.
- 18. The apparatus of claim 15 wherein each of the first and second supports comprises glass.

10

30

19. The apparatus of claim 15 wherein the first optical fiber holder comprises:

an adhesive to adhere a plurality of optical fibers that

5 align like a ribbon each other to form the first ribbonized optical fibers; and

a heat shrink tube to contain the first ribbonized optical fibers and the first support to hold the first ribbonized optical fibers and first support firmly by heat-shrinking; wherein

the adhesive is applied to the plurality of optical fibers at inside and outside of the heat shrink tube after the heat-shrinking.

- 15 20. The apparatus of claim 19 wherein the strength of the adhesive is in the middle of the strength of the first support and that of each optical fiber forming the first ribbonized optical fibers.
- 20 21. The apparatus of claim 19 wherein the first support comprises a column having a semicylindrical section.
- 22. The apparatus of claim 19 wherein the first ribbonized optical fibers are disposed adjacent to a flat side of the first support in the heat shrink tube.
 - 23. The apparatus of claim 19 wherein the first optical fiber holder further comprises a heat dissolving tube inserted in the heat shrink tube, the first ribbonized fibers being inserted in the heat dissolving tube.